



Invasive Species Management **Plans for** Florida

Privet Ligustrum spp. Oleaceae

INTRODUCTION

There are about 50 species of *Ligustrum*, all native to Europe, North Africa, and Asia. *Ligustrum* has been developed into an assortment of ornamental varieties in the U.S. and other parts of the world. In 1852, privet was introduced to the United States for use as an ornamental shrub and is still commonly used as a hedge. Because of *Ligustrum's* ability to tolerate air pollution and other poor environmental conditions, it was regarded as a great landscape plant and planted extensively. Unfortunately, this was before its invasive characteristics were discovered. Establishment of privet in many natural areas of Florida has occurred through its escape from cultivation. Glossy privet (*L. lucidum*) is listed as a Category II species with the potential to disrupt native plant communities in Florida by the Florida Exotic Pest Plant Council. Chinese privet (*L. sinense*) is a Category I species that is currently disrupting native plant communities in Florida.

DESCRIPTION

Ligustrum spp. are perennial shrubs that can grow up to 16 feet in height. *Ligustrum* bark is tan to gray in color with a smooth texture. Leaves are elliptic to ovate in shape, oppositely arranged on twigs. Flowers have both male and female parts. Each flower has petals fused into a tube with four separate lobes. Flowers are borne on small panicles on short lateral branches on the end of the twig. The oblong, blue/black fruit is a drupe containing 1 to 4 seeds. Fruit clusters persist through the winter. Mature trees can produce hundreds of fruit.

L. lucidum (glossy privet) is a large shrub or tree that grows to 30 feet in height, with spreading branches. Leaves are ovate to somewhat lanceolate and 3 to 5 inches long. *L. sinense* (Chinese privet) is smaller than glossy privet, growing to only 20 feet in height. Leaves are elliptic to somewhat oblong, 1 to 3 inches long, and pubescent on the midrib below.

Ligustrum spp. grows readily from seed or from root and stump sprouts. Wildlife can aid in the dispersal of the seed, often relocating the plant over long distances.

IMPACTS

Ligustrum spp. is capable of invading natural areas such as floodplain forests and woodlands. The aggressive nature of privets allows for the formation of dense thickets that out compete desirable plants. The amount of seed produced by privet is another mechanism for its prolonged survival. Even though privet is still used in the landscape and available for purchase at garden centers and online distributors, it is an invasive weed and should be treated as such.

MANAGEMENT

Ligustrum spp. control methods include mechanical controls such as mowing and cutting, physical control such as seedling removal and burning, and chemical control such as herbicide application. Herbicide control measures include foliar spraying in late autumn or early spring with glyphosate, triclopyr, or metsulfuron; cut stump applications using glyphosate or triclopyr; and basal bark applications of triclopyr.

<u>Preventative:</u> The first step in preventative control of privet is to limit planting and removal of existing plants within the landscape. If possible, removal should occur before seeds are produced. Since seeds remain on the plant for several months, care must be exercised to prevent seed spread and dispersal during the removal process.

<u>Cultural:</u> Plant native or non-invasive alternatives. Avoid large disturbances that allow for invasive species to colonize.

<u>Mechanical:</u> For smaller infestations or areas where herbicide applications are not feasible mowing and cutting are appropriate. Stems should be cut as close to the ground as possible at least once per growing season. Mowing and cutting will not eradicate *Ligustrum* spp., but it will provide some level of management. Continuous mowing will work, but frequency is key.

<u>Physical</u>: Hand pull young seedlings and small plants. Larger plants may need to be dug out. Plants should be pulled as soon as possible, before they produce seeds. The entire root must be removed to prevent resprouting.

Biological: Ligustrum spp. has no known biological control agents.

<u>Chemical:</u> Foliar applications of glyphosate or cut-stump applications of triclopyr or glyphosate are effective. Stems <0.5 inch diameter are susceptible to basal bark applications of 20% triclopyr-ester (Remedy) in oil. Larger stems must be notched or frilled.

Foliar sprays are effective for dense thickets of *Ligustrum*. Care must be taken to avoid non-target plants. The ideal time to treat is while plants are in leaf in late autumn or early winter but when many native species are dormant. Triclopyr at 1-2 quarts broadcast rate per acre or 2% solution is recommended. Glyphosate at 5% solution is often the most effective foliar option.

The cut stump method should be considered when treating individual shrubs. Immediately after cutting stems at or near ground level, apply a 25% solution of glyphosate and water or triclopyr and water to the cut stump, being careful to cover the entire surface. Effectiveness of the herbicide is increased if holes are cut in the top of the freshly felled stump.

The basal bark method consists of a mixture of 25% triclopyr and 75% basal oil applied to the basal parts of the shrub to a height of 12 to 15 inches from the ground. Thorough wetting is necessary for good control; spray until run-off is noticeable at the ground line. Basal applications are effective, but achieving thorough coverage on all the available stems can be difficult.

REFERENCES AND USEFUL LINKS:

Floridata Homepage: http://www.floridata.com

University of Florida Center for Aquatic and Invasive Plants: <u>http://aquat1.ifas.ufl.edu/welcome.html</u>

University of Florida's Cooperative Extension Electronic Data Information Source: <u>http://edis.ifas.ufl.edu/index.html</u>

Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp.

The Plant Conservation Alliance's Alien Plant Working Group. Weeds Gone Wild: Alien Plant Invaders of Natural Areas: <u>http://www.nps.gov/plants/alien/index.htm</u>

Pacific Island Ecosystems at Risk (PIER). Plant Threats to Pacific Ecosystems: <u>http://www.hear.org/pier/threats.htm</u>

Invasive Plants of the Eastern United States: http://www.invasive.org

USDA Natural Resources Conservation Service. Plants Database: http://plants.usda.gov

Batcher, M.S. 2000. ELEMENT STEWARDSHIP ABSTRACT for *Ligustrum* spp. Privet. The Nature Conservancy. Consulting Ecologist and Environmental Planner, 1907 Buskirk-West Hoosick Road, Buskirk, NY. http://tncweeds.ucdavis.edu/esadocs/documnts/ligu_sp.html

Tennessee Exotic Pest Plant Council: <u>http://www.se-eppc.org/states/tennessee.cfm</u>

Mature Plant

- L. lucidum (glossy) is a large shrub (>30 feet) with spreading branches
- L. sinense (Chinese) is smaller (~ 20 feet), more rambling with denser foliage





Leaves

- Glossy privet
 - -shiny, waxy
 - -3 to 5 inches long
- Chinese privet
 - -1 to 3 inches long
 - Pubescent below the midrib





Flowers and Fruit

- Flowers on tip of twig, small and yellowish
- Fruit are oblong, contain 1-4 seeds, blue to black when mature
- Readily dispered by wildlife

